# In the Claims

- 1. (Currently amended) A data mining system comprising:
- a client; and
- a service broker <del>configured to include</del> <u>comprising</u> an interface to receive a consultation request from the client through a computer network,

wherein the service broker operable to:

forwards forward the consultation request to a Neugent to invoke a consultation of the Neugent, and ; and

forwards forward to the client through the computer network a result object returned by the Neugent.

- 2. (Currently amended) The system of claim 1, wherein the consultation request includes comprises data for consulting the Neugent.
- 3. (Currently amended) The system of claim 2, wherein the Neugent is operable to perform performs a predictive analysis of the data included in the consultation request.
- 4. (Currently amended) The system of claim 1, wherein the consultation request includes comprises identification of a source of data for consulting the Neugent.
- 5. (Currently amended) The system of claim 4, wherein the Neugent is operable to perform performs a predictive analysis of input data obtained from the source identified in the consultation request.
- 6. (Currently amended) The system of claim 1, wherein the service broker <u>is</u> operable to receive receives through the interface a training request from the client, the training request <u>including comprising</u> training data, and <u>; and</u>

forwards forward the training request including comprising the training data to the Neugent to invoke training of the Neugent with the training data.

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- 7. (Currently amended) The system of claim 6, wherein the training request includes comprises a parameter specifying a ratio by which to split the training data between training the Neugent and testing the Neugent.
- 8. (Currently amended) The system of claim 6, wherein the service broker <u>is</u> operable to forward forwards to the client a training result object returned by the Neugent after training of the Neugent.
- 9. (Currently amended) The system of claim 1, wherein the Neugent <u>is operable</u> to:

groups group training data patterns into clusters, each cluster corresponding to a group of similar data patterns, and; and

predicts predict a probability of membership of an input pattern to a selected group.

10. (Currently amended) The system of claim 1, wherein the Neugent is operable to:

groups group training non-numeric patterns into clusters, each cluster corresponding to a group of similar non-numeric patterns, and ; and

predicts predict a probability of membership of an input non-numeric pattern to a selected group.

11. (Currently amended) The system of claim 1, wherein the Neugent is operable to:

forms form a cluster model by grouping training data patterns into a plurality of clusters, each cluster corresponding to a group of similar data patterns, and and determining for each cluster probabilities of transition from the cluster to each of the other clusters, and; and

predicts predict a probability of an event occurring by applying an input pattern to the cluster model.

12. (Currently amended) The system of claim 1, wherein the Neugent is operable to:

 $\frac{\text{forms form}}{\text{form}}$  an input-output model associated with a set of training data patterns, and  $\frac{1}{2}$ 

predicts predict an output value by applying the model to an input pattern.

13. (Currently amended) The system of claim 1, wherein the Neugent is operable to:

forms form rules associated with corresponding relationships in a set of training data patterns, and ; and

predicts predict an outcome by applying the rules to an input pattern.

- 14. (Currently amended) The system of claim 1, wherein the Neugent includes comprises a functional-link net.
- 15. (Currently amended) The system of claim 1, wherein the service broker is comprises a remote server.
- 16. (Currently amended) The system of claim 15, wherein the consultation request includes comprises an Extended Markup Language document.
  - 17. (Original) The system of claim 15, wherein the Neugent is server-side.
- 18. (Currently amended) A method for providing to a remote client machine a service to consult a Neugent, comprising:

receiving a consultation request from the remote client machine through a computer network;

forwarding the consultation request to the Neugent to invoke a consultation of the Neugent; and

forwarding to the remote client machine through the computer network a result object returned by the Neugent.

19. (Currently Amended) A computer system for providing to a remote client machine a service to consult a Neugent, comprising:

### a processor; and

a program storage device readable by the computer system, tangibly embodying a program of instructions executable by the processor to perform the method of claim 18; and a processor operable to execute the program instructions to:

receive a consultation request from the remote client machine through a computer network;

<u>forward the consultation request to the Neugent to invoke a consultation of the Neugent; and </u>

forward to the remote client machine through the computer network a result object returned by the Neugent.

- 20. (Canceled)
- 21. (Canceled)
- 22. (Previously presented) A method for providing to a remote client machine a service to train a Neugent, comprising:

receiving a train request from the remote client machine through a computer network; forwarding the train request to the Neugent to invoke training of the Neugent; and forwarding to the remote client machine through the computer network a training result object returned by the Neugent.

23. (Currently amended) A computer system, comprising:

### a processor; and

a program storage device readable by the computer system, tangibly embodying a program of instructions executable by the processor to perform the method of claim 22; and a processor operable to execute the program instructions to:

network;

forward the train request to the Neugent to invoke training of the Neugent; and
forward to the remote client machine through the computer network a training
result object returned by the Neugent.

- 24. (Canceled)
- 25. (Canceled)
- 26. (New) The method of claim 18, wherein the consultation request comprises data for consulting the Neugent.
- 27. (New) The method of claim 26, wherein the Neugent is operable to perform a predictive analysis of the data included in the consultation request.
- 28. (New) The method of claim 18, wherein the consultation request comprises identification of a source of data for consulting the Neugent.
- 29. (New) The method of claim 28, wherein the Neugent is operable to perform a predictive analysis of input data obtained from the source identified in the consultation request.

## 30. (New) The method of claim 18, comprising:

receiving a training request from the remote client machine, the training request comprising training data; and

forwarding the training request comprising the training data to the Neugent to invoke training of the Neugent with the training data.

- 31. (New) The method of claim 30, wherein the training request comprises a parameter specifying a ratio by which to split the training data between training the Neugent and testing the Neugent.
- 32. (New) The method of claim 30, comprising forwarding to the remote client machine a training result object returned by the Neugent after training of the Neugent.
  - 33. (New) The method of claim 18, comprising:

grouping, at the Neugent training data patterns into clusters, each cluster corresponding to a group of similar data patterns; and

predicting, at the Neugent, a probability of membership of an input pattern to a selected group.

## 34. (New) The method of claim 18, comprising:

grouping, at the Neugent, training non-numeric patterns into clusters, each cluster corresponding to a group of similar non-numeric patterns; and

predicting, at the Neugent, a probability of membership of an input non-numeric pattern to a selected group.

## 35. (New) The method of claim 18, comprising:

forming, at the Neugent, a cluster model by grouping training data patterns into a plurality of clusters, each cluster corresponding to a group of similar data patterns and determining for each cluster probabilities of transition from the cluster to each of the other clusters; and

predicting, at the Neugent, a probability of an event occurring by applying an input pattern to the cluster model.

## 36. (New) The method of claim 18, comprising:

forming, at the Neugent, an input-output model associated with a set of training data patterns; and

predicting, at the Neugent, an output value by applying the model to an input pattern.

## 37. (New) The method of claim 18, comprising:

forming, at the Neugent, rules associated with corresponding relationships in a set of training data patterns; and

predicting, at the Neugent, an outcome by applying the rules to an input pattern.

- 38. (New) The method of claim 18, wherein the Neugent comprises a functional-link net.
- 39. (New) The method of claim 18, wherein the method is performed at a remote server.
- 40. (New) The method of claim 39, wherein the consultation request comprises an Extended Markup Language document.
  - 41. (New) The method of claim 39, wherein the Neugent is server-side.

42. (New) Software for providing to a remote client machine a service to consult a Neugent, the software being embodied in a computer-readable medium and when executed operable to:

receive a consultation request from the remote client machine through a computer network;

forward the consultation request to the Neugent to invoke a consultation of the Neugent; and

forward to the remote client machine through the computer network a result object returned by the Neugent.

43. (New) Software for providing to a remote client machine a service to train a Neugent, the software being embodied in a computer-readable medium and when executed operable to:

receive a train request from the remote client machine through a computer network; forward the train request to the Neugent to invoke training of the Neugent; and forward to the remote client machine through the computer network a training result object returned by the Neugent.